

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the above-identified application.

### Listing of Claims:

1. (Currently amended) A transgenic plant comprising in its genome a transgene comprising a sense-~~or antisense~~ FPA polynucleotide sequence which causes the plant to have an ~~altered~~ earlier flowering time as compared to non-transgenic plants of the same species, the FPA polynucleotide having a coding region which has at least 50% 70% sequence identity at the amino acid to ~~SEQ ID NO:2~~ SEQ ID NO:3, the transgene sufficient along to cause the plant to flower earlier as compared to other plants of the same species without the transgene.

2.-3. (Cancelled)

4. (Previously presented) The transgenic plant of claim 1, wherein the FPA polynucleotide sequence is from *Arabidopsis thaliana*.

5. (Currently amended) ~~The A~~ transgenic plant ~~of claim 1,~~ comprising in its genome a transgene comprising a sense FPA polynucleotide sequence that causes the plant to have an earlier flowering time as compared to non-transgenic plants of the same species, wherein the FPA polynucleotide sequence is SEQ ID NO:2.

6. (Previously presented) Seed of the transgenic plant of claim 1 which carries the transgene in its genome.

7. (Previously presented) A plant grown from the seed of claim 6 which carries the transgene in its genome.

8. (Currently amended) A plant comprising in its genome a genetic construct comprising a sense-~~or antisense~~ FPA polynucleotide sequence, wherein the expression of the sequence in the plant causes ~~alteration in the~~ earlier flowering timing of the plant as compared to non-transgenic plants of the same species, the FPA polynucleotide having a

coding region which has at least ~~50%~~ 70% sequence identity to a protein encoded by SEQ ID NO:2.

9. (Previously presented) The plant of Claim 8, wherein the genetic construct further comprises a promoter, not natively associated with the FPA polynucleotide sequence, which promotes the expression of the FPA polynucleotide sequence in the plant.

10.-11. (Cancelled)

12. (Previously presented) The plant of claim 8, wherein the FPA polynucleotide sequence is from *Arabidopsis thaliana*.

13. (Currently amended) ~~The A plant of claim 8 comprising in its genome a genetic construct having a sense FPA polynucleotide sequence, wherein the expression of the sequence in the plant causes earlier flowering timing of the plant as compared to non-transgenic plants of the same species,~~ wherein the FPA polynucleotide sequence is SEQ ID NO:2.

14. (Previously presented) A seed of the plant of claim 8 which carries the genetic construction in its genome.

15. (Previously presented) A plant grown from the seed of claim 14 which carries the genetic construction in its genome.

16. (Currently amended) A plant seed comprising in its genome a genetic construct comprising a sense-~~or antisense~~ FPA polynucleotide sequence and a plant expressible promoter, which promotes expression of the FPA polynucleotide sequence in ~~the~~ a plant, the FPA polynucleotide having a coding region which has at least ~~50%~~ 70% sequence identity to a protein encoded by SEQ ID NO:2, and wherein expression of the sequence in the plant causes ~~alteration of the~~ earlier flowering timing of the plant as compared to non-transgenic plants of the same species.

17.-18. (Cancelled)

19. (Previously presented) The seed of claim 16, wherein the FPA polynucleotide sequence is from *Arabidopsis thaliana*.

20. (Previously presented) The seed of claim 16, wherein FPA polynucleotide sequence is SEQ ID NO:2.

21. (Previously presented) A transgenic plant cultivated from the seed of claim 16.

22. (Previously presented) An isolated DNA sequence comprising the coding sequence for the FPA gene from *Arabidopsis thaliana*, the FPA polynucleotide having a coding region which has at least 80% sequence identity to SEQ ID NO:2.

23. (Currently amended) The A DNA sequence of Claim 22 comprising the coding sequence for the FPA gene from *Arabidopsis thaliana*, wherein the polynucleotide sequence is SEQ ID NO:2.

24. (Currently amended) An isolated DNA sequence comprising a DNA sequence encoding ~~the~~ FPA protein from *Arabidopsis thaliana-thalian*, the protein having at least 80% sequence identity to SEQ ID NO:3.

25. (Currently amended) The DNA sequence of Claim 24, wherein the DNA sequence is SEQ ID NO:2.

26. (Currently amended) A method of producing a transgenic plant with ~~altered~~ earlier flowering characteristics comprising the steps of constructing a genetic construct comprising a plant expressible promoter and an FPA polynucleotide sequence, the FPA polynucleotide having a coding region which encodes a protein that has at least ~~50%~~ 70% sequence identity to the protein encoded by SEQ ID NO:2, introducing the genetic construct into a plant cell, selecting a plant that has received a copy of the genetic construct, and growing the plant under conditions that allow expression of the FPA gene such that the plant flowers earlier than plants of the same species without the genetic construct.

27. (Withdrawn) A method of altering FLC mRNA activity in a plant comprising the steps of constructing a genetic construct comprising a plant expressible promoter and an FPA polynucleotide sequence, introducing the genetic construct into a plant cell, selecting a plant that has received a copy of the genetic construct, and growing the plant under conditions that allow expression of the FPA gene.